In the Claims:

1. (currently amended) A method for acquiring packet synchronization in a packet type communication network, comprising the steps of:

providing a data packet having a framing format including a preamble split into a plurality of subpreambles of non-interleaved symbols followed by data symbols;

for individual subpreamble and for combined subpreamble options, determining the following parameter:

$$\beta_i = \frac{1}{T_i^2} \int_{t_i}^{t_i+T_i} \left| r(t) e^{-j\hat{\phi}_i} \right|^2 dt;$$

where T_i is the preamble or subpreamble duration in each option, t_i is the preamble or subpreamble start time, β_I is the approximation of α_I, and $\hat{\phi}_i$ is the estimated phase shift in each option; and

determining synchronization using correlation with a priori known symbols using the subpreamble or combined subpreamble option which provides the lowest β.

2. (currently amended) The method of claim 1 wherein said plurality of subpreambles is two, the two subpreambles being separated in time by other non-data symbols.

3. (previously presented) The method of claim 2 wherein said other symbols are one of other data signals or a priori known symbols.

4. (currently amended) A method for acquiring packet synchronization in a packet type communication network, comprising the steps of:

providing a data packet having a framing format including a preamble split into a plurality of subpreambles of non-interleaved symbols followed by data symbols;

determining whether any of said subpreambles have been affected by at least one of impulse noise or burst noise; and

determining ~~determine~~ synchronization using the subpreambles of said plurality of subpreambles which have not been affected by said at least one of impulse noise or burst noise.

5. (currently amended) The method of claim 4 wherein said plurality of subpreambles is two, the two subpreambles being separated in time by other non-data symbols.

6. (previously presented) The method of claim 5 wherein said other symbols are one of other data signals or a priori known symbols.

7. (new) The method of claim 1 wherein said preambles are separated by a number of non-data symbols greater than a predetermined typical noise impulse length.

8. (new) The method of claim 2 wherein said preambles are separated by a number of non-data symbols greater than a predetermined typical noise impulse length.

9. (new) The method of claim 3 wherein said preambles are separated by a number of non-data symbols greater than a predetermined typical noise impulse length.

10. (new) The method of claim 4 wherein said preambles are separated by a number of non-data symbols greater than a predetermined typical noise impulse length.

11. (new) The method of claim 5 wherein said preambles are separated by a number of non-data symbols greater than a predetermined typical noise impulse length.

12. (new) The method of claim 6 wherein said preambles are separated by a number of non-data symbols greater than a predetermined typical noise impulse length.